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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/523,028 | 08/10/2005 | Georges Zagdoun | 264641US6PCT | 8400 |
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| EXAMINER |
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NINO, ADOLFO

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| ART UNIT | PAPER NUMBER |
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2831

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,028

Applicant(s)

ZAGDOUN, GEORGES

Examiner

Adolfo Nino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/2/05</u> . | 6) <input type="checkbox"/> Other: ____. |

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 2/2/05 is being considered by the examiner.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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(I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The specification is missing section headings (see above section headings).

The disclosure is objected to because of the following informalities:

The Examiner only received up to page 10 of the specification.

Appropriate correction is required.

Claim Objections

Claim 23 is objected to because of the following informalities:

Claim 23, line 1, "23" should be -----22-----.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tone et al. (US 6,686,536 B2) in view of Gardiner et al. (US 6,886,964 B2).

Regarding claim 22 (new), Tone et al. disclose an optical filtering/electromagnetic screening structure (fig. 1) to be joined to at least one transparent substrate (5), the structure comprising: at least first (4) and second plastic sheets (5) and including, or intended to be joined to the sheets (4, 5), a conducting electromagnetic screening element (6), wherein at least one of the first and second sheets is made of a thermoplastic (col. 4, lines 60-65), the other of the first and second sheets (4, 5) constitutes a sheet for covering the conducting element or the thermoplastic sheet (fig. 1), **except for** either one or both of the first and second sheets incorporating at least one mineral pigment or at least one organic dye to produce, in respect of the structure, an orange filter for light of wavelength centered on 590 nm.

Gardiner et al. teach that it is known to have at least one mineral pigment or at least one organic dye to produce an orange filter for light of wavelength centered on 590 nm as set forth at column 9, lines 11-23 and column 20, lines 31-36. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have at least one mineral pigment or at least one organic dye to produce an orange filter for light of wavelength centered on 590 nm, as taught by Gardiner et al. in order to reduce the intensity of the unwanted orange peak which is at 590 nm.

Regarding claim 23 (New), the modified Tone et al. disclose a structure according to Claim [23] 22, wherein at least one of the first and second sheets (4, 5) incorporates at least one mineral pigment or at least one organic dye to form an infrared filter in the 800 to 1250 nm wavelength range (Tone et al. col. 6, line 53).

Regarding claim 24 (New), the modified Tone et al. disclose a structure according to Claim 23, wherein one of the first and second sheets (4, 5) is neutral while the other of the first and second sheets includes at least two pigments or dyes (col. 9, lines 26-50 in Gardiner et al.) that provide, through the structure, the orange filter and the infrared filter, respectively (col. 9, lines 44-45 in Gardiner et al.).

Regarding claim 25 (New), the modified Tone et al. disclose a structure according to Claim 23, wherein the thermoplastic sheet includes a pigment or a dye that provides, through the structure, the orange filter or the infrared filter and the covering sheet includes a pigment or dye that provides the orange filter or the infrared filter that the other, thermoplastic, sheet does not provide (col. 9, lines 26-50 in Gardiner et al.).

Regarding claim 26 (New), the modified Tone et al. disclose a structure according to Claim 22, wherein the conducting element (6) is formed from a metal wire gauze (col. 5, lines 6-14 of Tone et al.) joined between the first and second sheets (fig. 1).

Regarding claim 27 (New), the modified Tone et al. disclose a structure according to Claim 22, wherein the conducting element (6) is formed from a metal wire mesh (12) deposited on a support sheet (12) whose composition is based on one of following materials: polycarbonate, polymethyl (meth)acrylate, polyethylene terephthalate, polyethersulphone, polyetherketone, and acrylonitrile-styrene copolymer (col. 5, lines 51-67 of Tone et al.).

Regarding claim 28 (New), the modified Tone et al. disclose a structure according to Claim 27, wherein the support sheet (12) for the conducting element

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constitutes the covering sheet, the conducting element being placed between the thermoplastic first sheet and the covering sheet (fig. 2).

Regarding claim 29 (New), the modified Tone et al. disclose a structure according to Claim 27, wherein the covering sheet bearing the conducting element (6) is coated on an opposite side from the conducting element with a protective film made of polyethylene terephthalate (PET), or of polyvinyl chloride (PVC), or of polypropylene, or of high-density polyethylene (col. 6, lines 4-11), with a thickness of less than or equal to 60 μm (col. 6, lines 11-12).

Regarding claim 30 (New), the modified Tone et al. disclose a structure according to Claim 22, wherein the conducting element (6) is formed from a metal layer, deposited on a support sheet that is formed by the covering sheet, the element being placed between the covering sheet and the thermoplastic first sheet (figs. 1, 2).

Regarding claim 31 (New), the modified Tone et al. disclose a structure according to Claim 27, wherein the support sheet (12) for the conducting element (6) is formed from a complementary plastic sheet that is laminated between the thermoplastic first sheet and the covering sheet (fig. 2).

Regarding claim 32 (New), the modified Tone et al. disclose a structure according to claim 22, wherein the thermoplastic first sheet (4, 5) and the covering sheet (4, 5) when it does not constitute a support sheet for the conducting element are made of polyvinyl butyral, or of polyurethane, or of ethylene-vinyl acetate (col. 4, lines 60-64 of Tone et al.).

Regarding claim 33 (New), the modified Tone et al. disclose a structure according to claim 22, joined to a single transparent substrate (fig. 2), the thermoplastic first sheet being joined to the substrate (fig. 2).

Regarding claim 34 (New), the modified Tone et al. disclose a structure according to Claim 22, laminated between two transparent substrates (fig. 7), the thermoplastic sheet and the covering sheet being joined to each of the substrates, respectively.

Regarding claim 35 (New), the modified Tone et al. disclose a structure according to Claim 33, joined to at least one transparent substrate (5), wherein the transparent substrate (5) has, on its face that faces the thermoplastic sheet (4), a metal layer (6) to form the conducting element when the conducting element is joined to the structure (fig. 1).

Regarding claim 36 (New), the modified Tone et al. disclose a structure according to Claim 33, providing, in respect of a structure/substrate assembly, an infrared filter with a corresponding light transmission not exceeding 22%, and an orange filter with a corresponding light transmission of between 20% and 40%, the structure/substrate assembly having a light transmission coefficient in the visible of between 40% and 60%, with a less than 3% purity (col. 7, line 50 through col. 8, line 22 & col. 9, lines 26-45 of Gardiner et al.).

Regarding claim 37 (New), the modified Tone et al. disclose a structure according to Claim 36, wherein the infrared filter ensures transmission at 815 nm of at most 22%, transmission at 870 nm of at most 18%, and transmission between 900 and

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1250 nm of at most 12% (col. 7, line 50 through col. 8, line 22 & col. 9, lines 26-45 of Gardiner et al.).

Regarding claim 38 (New), the modified Tone et al. disclose a display screen (col. 1, lines 19-20), having on a front face a structure according to Claim 33.

Regarding claim 39 (New), the modified Tone et al. disclose a screen according to Claim 38, wherein at least one of the glass substrates is made of toughened glass (col. 4, lines 66-67 of Tone et al.).

Regarding claim 40 (New), the modified Tone et al. disclose a screen according to Claim 38, wherein at least one of the glass substrates (4, 5) has an antireflection coating (8) on an opposite face from the structure.

Regarding claim 41 (New), the modified Tone et al. disclose a screen according to Claim 38, wherein the covering sheet has an antireflection coating (8) on an opposite face from the thermoplastic first sheet.

Regarding claim 42 (New), the modified Tone et al. disclose a screen according to Claim 38, wherein the structure is adhesively bonded (7) directly to the front face of the screen.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following U.S. Patent Application publications and U.S. Patents disclose a filter with an orange spectrum at 590 nm: Lee et al. (US 2006/0115750 A1); Choi et al. (US 2005/0186421 A1); Ryu et al. (US 2005/0179368


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A1); Lee et al. (US 2005/0042531 A1); Noda et al. (US 2004/0204555 A1); Teng et al. (US 6,989,112 B2); Nordman et al. (US 6,856,390 B2); Oishi et al. (US 6,686,896 B2); Sohn et al. (US 6,650,052 B1); Ishihara et al. (US 5,989,785); Vriens et al. (US 4,683,398).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (571) 272-1981. The examiner can normally be reached on M-F 8:00--4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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